**United States Department of the Interior**
**Fish and Wildlife Service**
**Leavenworth National Fish Hatchery Complex**
**Entiat, Leavenworth and Winthrop Salmon Hatcheries**
**12790 Fish Hatchery Road**
**Leavenworth, WA 98826**
**Phone: (509) 548-7641**
**Fax: (509) 548-3401**

April 17, 2012

Lindsay Guzzo
Environmental Engineer
Environmental Protection Agency
Office of Water and Watersheds
1200 Sixth Ave
NPDES Permits Unit OWW-130
Seattle, WA 98101
Phone: (206) 553-0268
Fax: (206) 553-1280
Email: guzzo.lindsay@epa.gov


RE: National Pollutant Discharge Elimination System (NPDES) Permit - Updated Information for Leavenworth National Fish Hatchery (Outfall #6)

Mrs. Guzzo,

The Leavenworth National Fish Hatchery (LNFH) submitted a new NPDES permit application on October 24, 2011 to the Environmental Protection Agency. In that application, LNFH proposed to pump a portion of discharge water destined for Outfall #1 upstream to a new discharge point (Outfall #6, ~ rm 3.3) in the Hatchery Channel section (rm 2.8 to 3.8) of Icicle Creek. At the time the application was submitted, LNFH stated that the details for this new proposed discharge point would be provided within 6 months.

The purpose of Outfall #6 is to recharge LNFH's wells. The LNFH operates seven wells which produce the quality of water needed to sustain its fish production program. Currently, LNFH needs between 1,060 and 6,590 gpm of ground water during its fish production cycle. The hatchery's wells draw water from two aquifers, one deep and one shallow. Wells 1 through 4 and 7 draw water solely from the shallow aquifer, well 5 from the deep aquifer, and well 6 draws water from both. The shallow aquifer is influenced by surface water. Recharge of the shallow aquifer is directly affected by how much water is present in the hatchery channel. The hatchery channel is dewatered when the stream flow in Icicle Creek above both channels is approximately below 300 cfs and flow into the historical channel is unrestricted. Dewatering of the hatchery

channel can occur in late summer, fall, and early winter for short or long periods of time. Dewatering of the hatchery channel reduces recharge to the shallow aquifer causing groundwater levels and pumping capacities to drop when wells are in production. Further information on Outfall #6 has been included in the enclosed, revised CONTINUATION SHEET from EPA FORM 3510-2B (Rev. 11-08).

If further information is required please contact Malenna Cappellini the Leavenworth Fisheries Complex's Environmental Compliance Biologist at (509) 548-2928 or malenna_cappellini@fws.gov.

Sincerely,

David B. Irving,
Leavenworth Fisheries Complex Manager

CONTINUATION SHEET from EPA FORM 3510-2B (Rev. 11-08)

A.

| *1. OUTFALL No. (see operational description below)* | *2. FLOW (gallons per day)* | | |
|---|---|---|---|
| | *a. Maximum Daily* | *b. Maximum 30 Day* | *c. Long Term Average* |
| 1 | 32,800,000 | 984,000,000 | 26,000,000 |
| 2 | 8,640,000 | 259,200,000 | 288,000 |
| 3 | 0 | 0 | 0 |
| 4 | 5,760,000 | 172,800,000 | 5,040,000 |
| 5 | 72,000 | 1,008,000 | 72,000 |
| 6 | 32,800,000 | 984,000,000 | 8,100,000 |

Outfall #1: Base of Fish (Adult Return) Ladder
The majority of river and well water used for hatchery operations returns to Icicle Creek from Outfall #1 near the base of the adult return ladder (~ rm 2.8) except during rearing unit cleaning and maintenance activities when all water is routed through the pollution abatement ponds. All river water and groundwater used at the hatchery, minus any leakage and evaporation, is returned to Icicle Creek (non-consumptive use).

Outfall #2: Pollution Abatement Ponds
As of 2011, Leavenworth NFH has a second functional pollution abatement pond. When online, both pollution abatement ponds discharge into Icicle Creek at Outfall #2 (~rm 2.7). Outfall #2 is used during rearing unit cleaning and maintenance activities.

Outfall #3: Overflow Canal from the Screen Chambers
Currently, Outfall #3 (~rm 3.8) is not used as a discharge point by the hatchery. However, the hatchery wishes to retain this discharge point for potential future use. In the past, Outfall #3 was operated intermittently as a fish return bypass for the hatchery's water delivery system.

Outfall #4: Top of Fish (Adult Return) Ladder
In the past, Outfall #4 was used for 1 to 2 weeks a year in late April to release hatchery pre-smolts into Icicle Creek (~ rm 2.8). Currently, pre-smolts are pumped from rearing units through an above ground pipeline into Icicle Creek at approximately rm 2.75 (Outfall #5). However, the hatchery wishes to retain Outfall #4 for emergency releases and potential future use. When in operation, discharge from Outfall #1 is reduced by the amount released at Outfall #4.

Outfall #5: Pumped/Piped Fish Release
Outfall #5 is currently used for 1 to 2 weeks a year in late April to release hatchery pre-smolts which are pumped from rearing units through an above ground pipeline into Icicle Creek (~ rm 2.75). When in operation, discharge from Outfall #1 is reduced by the amount released at Outfall #5.

Outfall #6: Pump Discharge to Hatchery Channel

Outfall #6 ( ~rm 3.3) in the Hatchery Channel section (rm 2.8 to 3.8) of Icicle Creek will be used, as necessary, to recharge LNFH's wells. When in operation, discharge from Outfall #1 is reduced by the amount released at Outfall #6. (The long term average of 8,100,000 gallons per day was estimated from the calculation of pumping 53 cfs continuous for 3 months, or 26 cfs for 6 months).

B. Rearing and holding units currently in operation at Leavenworth NFH include:

- 2, 15' x 150' adult holding raceways
- 45, 8' x 80' raceways
- 14, 10' x 100' covered raceways
- 122 fiberglass tanks
- 16 of 40 small Foster-Lucas rearing units
- 2 of 22 large Foster-Lucas rearing units

C.1. Icicle Creek is the receiving water body.

C.2. Leavenworth NFH's water sources include Icicle Creek, Snow/Nada Lake Basin, and 7 wells. The hatchery's water rights include:

| CERTIFICATE # | PRIORITY DATE | SOURCE | AMOUNT |
|---|---|---|---|
| 1824 | 03/26/1942 | Icicle Creek | 42 cfs (18,851 gpm) |
| 1825 | 03/26/1942 | Snow & Nada Lakes | 16,000 acre feet |
| | | | |
| 016378 | 08/01/1939 | Groundwater (1 Wells) | 1.56 cfs (700 gpm) |
| 016379 | 06/01/1940 | Groundwater (1 Wells) | 2.01 cfs (900 gpm) |
| 3103-A | 10/16/1957 | Groundwater (1 Wells) | 2.67 cfs (1200 gpm) |
| G4-27115C | 10/20/1980 | Groundwater (4 Wells) | 8.69 cfs (3900 gpm) |

**United States Department of the Interior**
**Fish and Wildlife Service**
**Leavenworth National Fish Hatchery Complex**
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**12790 Fish Hatchery Road**
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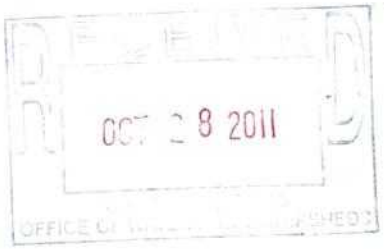
**Phone: (509) 548-7641**
**Fax: (509) 548-3401**

October 24, 2011

Lindsay Guzzo
Environmental Engineer
Environmental Protection Agency
Office of Water and Watersheds
1200 Sixth Ave
NPDES Permits Unit OWW-130
Seattle, WA 98101
Phone: (206) 553-0268
Fax: (206) 553-1280
Email: guzzo.lindsay@epa.gov




RE: National Pollutant Discharge Elimination System (NPDES) Permit - Updated Information for Leavenworth National Fish Hatchery

Mrs. Guzzo,

Leavenworth National Fish Hatchery (LNFH) has made significant changes to its operations since the 2005 submittal for a NPDES permit. These changes include but are not limited to a reduction in production from 1.625 million to 1.2 million spring Chinook salmon; the use of a low phosphorus feed during the critical months of March, April, July, August, and September with the exception of fry in the nursery building; and the construction and operation of a second pollution abatement pond. These changes in operations were initiated to improve the health of the hatchery's spring Chinook salmon and to improve the quality of water (lower phosphorus) discharged into Icicle Creek. Also, in 2011 through the endangered species consultation process with the U.S. Fish and Wildlife Service, LNFH further outlined and detailed all hatchery operation and maintenance activities. Since 2005, LNFH personnel have supplied this information to the Environmental Protection Agency (EPA) to update its current NPDES permit application. In recent discussions with EPA and WA Department of Ecology staff, it became clear that LNFH needed to resubmit a NPDES permit application to ensure that EPA receives all necessary information and to eliminate confusion.

Enclosed is an updated Form 1: General Information, Form 2B NPDES application for a permit to discharge wastewater from an aquatic animal production facility, a Continuation Sheet for Form 2B, and the March 2011 Biological Assessment for the Operation and Maintenance of Leavenworth National Fish Hatchery.

If further information is required please contact Malenna Cappellini the Leavenworth Fisheries Complex's Environmental Compliance Biologist at (509) 548-2928 or malenna_cappellini@fws.gov.

Sincerely,

Al Jensen,
Leavenworth NFH Manager

Please print or type in the unshaded areas only.

Form approved. OMB No. 2040-0086.

FORM 1 GENERAL

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

# GENERAL INFORMATION

*Consolidated Permits Program*

*(Read the "General Instructions" before starting.)*

I. EPA I.D. NUMBER

| S | | T/A | C |
|---|---|---|---|
| F | | | D |
| 1 | 2 — 13 | 14 | 15 |

| LABEL ITEMS | |
|---|---|
| I. EPA I.D. NUMBER | PLEASE PLACE LABEL IN THIS SPACE |
| III. FACILITY NAME | |
| V. FACILITY MAILING ADDRESS | |
| VI. FACILITY LOCATION | |

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

## II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of **bold-faced terms**.

| SPECIFIC QUESTIONS | Mark "X" YES | NO | FORM ATTACHED |
|---|---|---|---|
| A. Is this facility a **publicly owned treatment works** which results in a **discharge** to **waters of the U.S.**? (FORM 2A) | | X | |
| | 16 | 17 | 18 |
| B. Does or will this facility *(either existing or proposed)* include a **concentrated animal feeding operation** or **aquatic animal production facility** which results in a **discharge** to **waters of the U.S.**? (FORM 2B) | X | | X |
| | 19 | 20 | 21 |
| C. Is this a facility which currently results in **discharges** to **waters of the U.S.** other than those described in A or B above? (FORM 2C) | | X | |
| | 22 | 23 | 24 |
| D. Is this a proposed facility *(other than those described in A or B above)* which will result in a **discharge** to **waters of the U.S.**? (FORM 2D) | | X | |
| | 25 | 26 | 27 |
| E. Does or will this facility treat, store, or dispose of **hazardous wastes**? (FORM 3) | | X | |
| | 28 | 29 | 30 |
| F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4) | | X | |
| | 31 | 32 | 33 |
| G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4) | | X | |
| | 34 | 35 | 36 |
| H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4) | | X | |
| | 37 | 38 | 39 |
| I. Is this facility a proposed **stationary source** which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5) | | X | |
| | 40 | 41 | 42 |
| J. Is this facility a proposed **stationary source** which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an **attainment area**? (FORM 5) | | X | |
| | 43 | 44 | 45 |

## III. NAME OF FACILITY

C 1 SKIP: USFWS Leavenworth National Fish Hatchery

15 | 16 – 29 | 30 — 69

## IV. FACILITY CONTACT

| A. NAME & TITLE *(last, first, & title)* | B. PHONE *(area code & no.)* |
|---|---|
| C 2 Jensen, Al, Hatchery Manager | (509) 548-2917 |
| 15 — 16 — 45 | 46 — 48 — 49 — 51 — 52 — 55 |

## V. FACILTY MAILING ADDRESS

A. STREET OR P.O. BOX

C 3 12790 Fish Hatchery Road

15 — 16 — 45

| B. CITY OR TOWN | C. STATE | D. ZIP CODE |
|---|---|---|
| C 4 Leavenworth | WA | 98826 |
| 15 — 16 — 40 | 41 — 42 | 47 — 51 |

RECEIVED OCT 28 2011 U.S. ENVIRONMENTAL PROTECTION AGENCY OFFICE OF WATER AND WATERSHEDS

## VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER

C 5 12790 Fish Hatchery Road

15 — 16 — 45

B. COUNTY NAME

Chelan

46 — 70

| C. CITY OR TOWN | D. STATE | E. ZIP CODE | F. COUNTY CODE *(if known)* |
|---|---|---|---|
| C 6 Leavenworth | WA | 98826 | |
| 15 — 16 — 40 | 41 — 42 | 47 — 51 | 52 — 54 |



CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

**VII. SIC CODES** *(4-digit, in order of priority)*

| A. FIRST | B. SECOND |
|---|---|
| 7 0921 *(specify)* Fish Hatchery | 7 *(specify)* |
| **C. THIRD** | **D. FOURTH** |
| 7 *(specify)* | 7 *(specify)* |

**VIII. OPERATOR INFORMATION**

A. NAME: 8 U.S. Fish and Wildlife Service, Leavenworth Fisheries Complex

B. Is the name listed in Item VIII-A also the owner? ☑ YES ☐ NO

C. STATUS OF OPERATOR *(Enter the appropriate letter into the answer box: if "Other," specify.)*

F = FEDERAL
S = STATE
P = PRIVATE
M = PUBLIC *(other than federal or state)*
O = OTHER *(specify)*

F *(specify)*

D. PHONE *(area code & no.)*: A (509) 548-7641

E. STREET OR P.O. BOX: 12790 Fish Hatchery Road

| F. CITY OR TOWN | G. STATE | H. ZIP CODE | IX. INDIAN LAND |
|---|---|---|---|
| B Leavenworth | WA | 98826 | Is the facility located on Indian lands? ☐ YES ☑ NO |

**X. EXISTING ENVIRONMENTAL PERMITS**

| A. NPDES *(Discharges to Surface Water)* | D. PSD *(Air Emissions from Proposed Sources)* |
|---|---|
| 9 N WA-000190-2 | 9 P |
| **B. UIC** *(Underground Injection of Fluids)* | **E. OTHER** *(specify)* |
| 9 U | 9 *(specify)* |
| **C. RCRA** *(Hazardous Wastes)* | **E. OTHER** *(specify)* |
| 9 R | 9 *(specify)* |

**XI. MAP**

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers, and other surface water bodies in the map area. See instructions for precise requirements.

**XII. NATURE OF BUSINESS** *(provide a brief description)*

Currently, LNFH targets a release of 1.2 million spring Chinook salmon pre-smolts into Icicle Creek (approx. rm 2.7) during late April. Also, LNFH supports the Yakama Nation's Coho Reintroduction Project by providing hatchery facilities for part of its expanded coho salmon production program. Approximately, 500,000 coho salmon are released into Icicle Creek. For further details on hatchery production see Attachment A (Biological Assessment for the Operation and Maintenance of Leavenworth National Fish Hatchery, March 2011).

**XIII. CERTIFICATION** *(see instructions)*

*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*

| A. NAME & OFFICIAL TITLE *(type or print)* | B. SIGNATURE | C. DATE SIGNED |
|---|---|---|
| Allen Jensen, Hatchery Manager | Allen C. Jensen | 10/24/11 |

COMMENTS FOR OFFICIAL USE ONLY

C

EPA Form 3510-1 (8-90)

Form 1: x1. map (1) LNFH

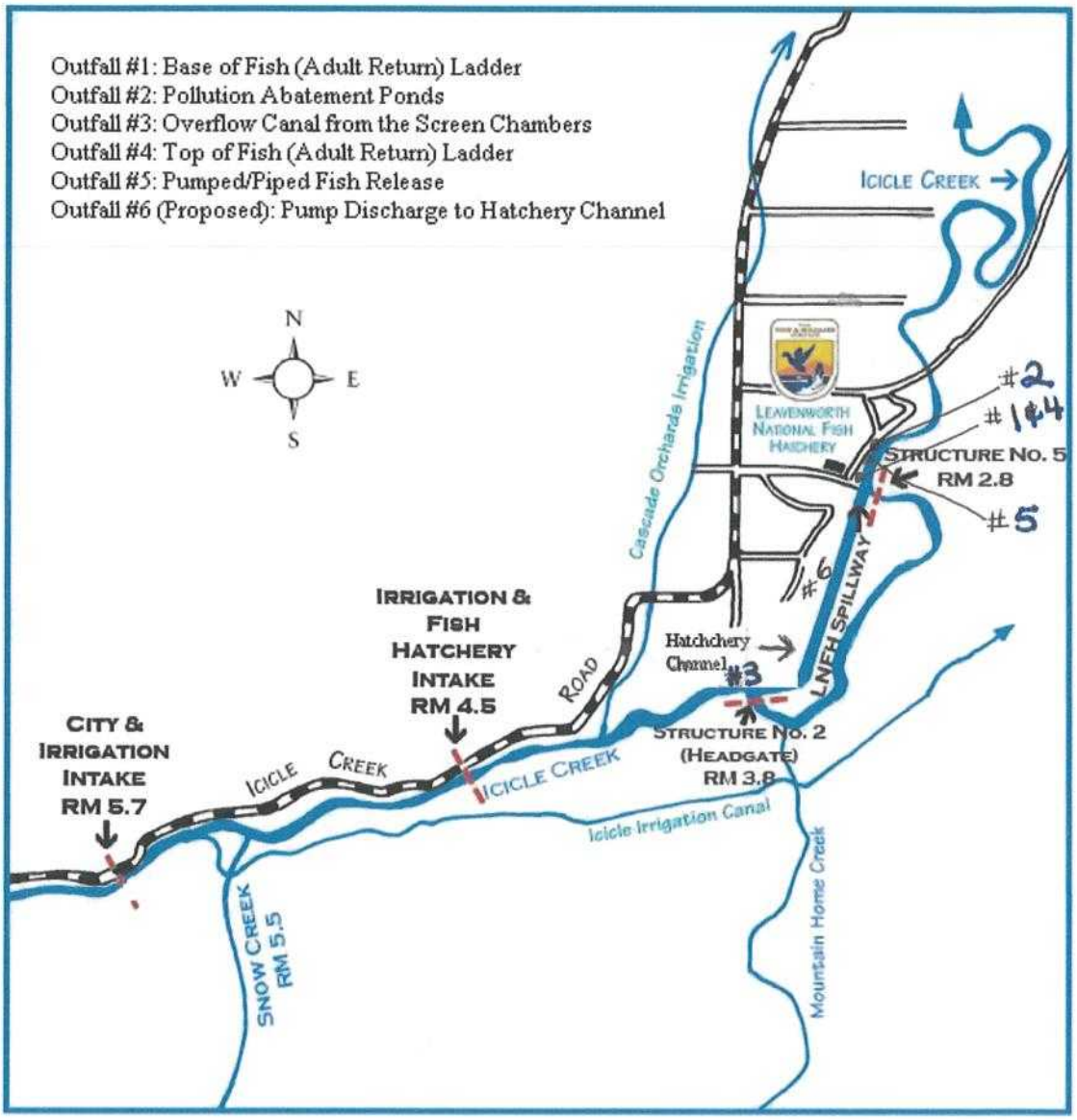
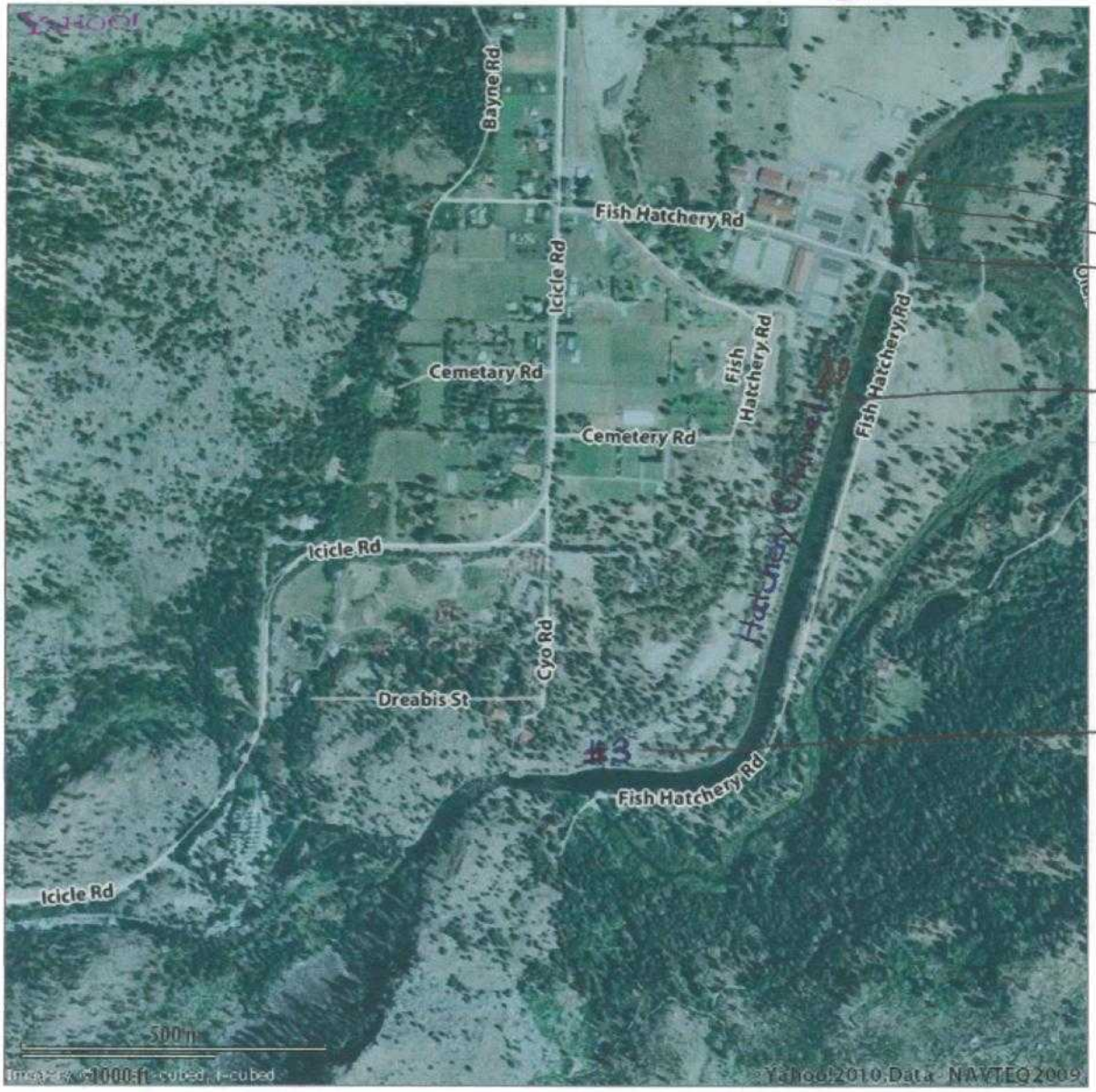



Figure 1. Leavenworth National Fish Hatchery and Vicinity

Form 1. XI. Map(2) L[illegible]H

## Map of Leavenworth, WA




When using any driving directions or map, it's a good idea to do a reality check and make sure the road still exists, watch out for construction, and follow all traffic safety precautions. This is only to be used as an aid in planning.

Form Approved
OMB No. 2040-0250

**EPA I.D. NUMBER** (*copy from Item 1 of Form 1*)

FORM 2B NPDES

**EPA**

U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATIONS FOR PERMIT TO DISCHARGE WASTEWATER
CONCENTRATED ANIMAL FEEDING OPERATIONS AND AQUATIC ANIMAL PRODUCTION FACILITIES

**I. GENERAL INFORMATION** Applying for: Individual Permit ☐ Coverage Under General Permit ☐

| A. TYPE OF BUSINESS | B. CONTACT INFORMATION | C. FACILITY OPERATION STATUS |
|---|---|---|
| ☐ 1. Concentrated Animal Feeding Operation (complete items B, C, D, and section II)<br>☒ 2. Concentrated Aquatic Animal Production Facility (complete items B, C, and section III) | Owner/or<br>Operator Name: Al Jensen, Hatchery Manager<br>Telephone: ( 509 ) 548-2917<br>Address: 12790 Fish Hatchery Road<br>Facsimile: ( 509 ) 548-3401<br>City: Leavenworth State: Wa Zip Code: 98826 | ☒ 1. Existing Facility<br>☐ 2. Proposed Facility |

D. FACILITY INFORMATION

Name: USFWS Leavenworth National Fish Hatchery Telephone: ( 509 ) 548-7641
Address: 12790 Fish Hatchery Road Facsimile: ( 509 ) 548-3401
City: Leavenworth State: WA Zip Code: 98826
County: Chelan Latitude: S26 T24N R17E Longitude:

If contract operation: Name of Integrator:
Address of Integrator:

**II. CONCENTRATED ANIMAL FEEDING OPERATION CHARACTERISTICS**

A. TYPE AND NUMBER OF ANIMALS

| 1. TYPE | 2. ANIMALS | |
|---|---|---|
| | NO. IN OPEN CONFINEMENT | NO. HOUSED UNDER ROOF |
| ☐ Mature Dairy Cows | | |
| ☐ Dairy Heifers | | |
| ☐ Veal Calves | | |
| ☐ Cattle (not dairy or veal calves) | | |
| ☐ Swine (55 lbs. or over) | | |
| ☐ Swine (under 55 lbs.) | | |
| ☐ Horses | | |
| ☐ Sheep or Lambs | | |
| ☐ Turkeys | | |
| ☐ Chickens (Broilers) | | |
| ☐ Chickens (Layers) | | |
| ☐ Ducks | | |
| ☐ Other: Specify _____ | | |
| 3. TOTAL ANIMALS | | |

B. MANURE, LITTER, AND/OR WASTEWATER PRODUCTION AND USE

1. How much manure, litter, and wastewater is generated annually by the facility? _____tons _____gallons
2. If land applied how many acres of land under the control of the applicant are available for applying the CAFOs manure/litter/wastewater? _____acres
3. How many tons of manure or litter, or gallons of wastewater produced by the CAFO will be transferred annually to other persons? _____tons _____gallons

C. ☐ TOPOGRAPHIC MAP

D. TYPE OF CONTAINMENT, STORAGE AND CAPACITY

| 1. Type of Containment | Total Capacity (in gallons) |
|---|---|
| ☐ Lagoon | |
| ☐ Holding Pond | |
| ☐ Evaporation Pond | |
| ☐ Other: Specify _____ | |

2. Report the total number of acres contributing drainage: _____ acres

| 3. Type of Storage | Total Number of Days | Total Capacity (gallons/tons) |
|---|---|---|
| ☐ Anaerobic Lagoon | | |
| ☐ Storage Lagoon | | |
| ☐ Evaporation Pond | | |
| ☐ Aboveground Storage Tanks | | |
| ☐ Belowground Storage Tanks | | |
| ☐ Roofed Storage Shed | | |
| ☐ Concrete Pad | | |
| ☐ Impervious Soil Pad | | |
| ☐ Other: Specify _____ | | |

E. NUTRIENT MANAGEMENT PLAN

**Note: Effective February 27, 2009, a permit application is not complete until a nutrient management plan is submitted to the Permitting Authority.**

1. Please indicate whether a nutrient management plan has been included with this permit application. ☐ Yes ☐ No

2. If no, please explain:

3. Is a nutrient management plan being implemented for the facility? ☐ Yes ☐ No

4. The date of the last review or revision of the nutrient management plan. Date: _____

5. If not land applying, describe alternative use(s) of manure, litter, and/or wastewater:

F. LAND APPLICATION BEST MANAGEMENT PRACTICES

Please check any of the following best management practices that are being implemented at the facility to control runoff and protect water quality:

☐ Buffers ☐ Setbacks ☐ Conservation tillage ☐ Constructed wetlands ☐ Infiltration field ☐ Grass filter ☐ Terrace

Form Approved
OMB No. 2040-0250

## III. CONCENTRATED AQUATIC ANIMAL PRODUCTION FACILITY CHARACTERISTICS

| A. For each outfall give the maximum daily flow, maximum 30-day flow, and the long-term average flow. | | | | B. Indicate the total number of ponds, raceways, and similar structures in your facility. | | |
|---|---|---|---|---|---|---|
| 1. Outfall No. | 2. Flow (*gallons per day*) | | | 1. Ponds | 2. Raceways | 3. Other |
| | a. Maximum. Daily | b. Maximum 30 Day | c. Long Term Average | C. Provide the name of the receiving water and the source of water used by your facility. | | |
| See Attached Continua-tion Sheet for III. A, B, & C | | | | | | |
| | [redacted] | | | 1. Receiving Water | 2. Water Source | |

D. List the species of fish or aquatic animals held and fed at your facility. For each species, give the total weight produced by your facility per year in pounds of harvestable weight, and also give the maximum weight present at any one time.

| 1. Cold Water Species | | | 2. Warm Water Species | | |
|---|---|---|---|---|---|
| a. Species | b. Harvestable Weight (*pounds*) | | a. Species | b. Harvestable Weight (*pounds*) | |
| | (1) Total Yearly | (2) Maximum | | (1) Total Yearly | (2) Maximum |
| Spring Chinook salmon | 75,000 | 80,000 | N/A | | |
| Coho salmon | 10,000 | 33,000 | | | |

| E. Report the total pounds of food during the calendar month of maximum feeding. | 1. Month | 2. Pounds of Food |
|---|---|---|
| | April | 14,000 |

## IV. CERTIFICATION

*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*

| A. Name and Official Title (*print or type*) | B. Telephone ( 509 ) 548-2917 |
|---|---|
| Al Jensen, LNFH Manager | |
| C. Signature | D. Date Signed 10/24/11 |

CONTINUATION SHEET from EPA FORM 3510-2B (Rev. 11-08)

A.

| *1. OUTFALL No. (see operational description below)* | *2. FLOW (gallons per day)* | | |
|---|---|---|---|
| | *a. Maximum Daily* | *b. Maximum 30 Day* | *c. Long Term Average* |
| 1 | 32,800,000 | 984,000,000 | 26,000,000 |
| 2 | 8,640,000 | 259,200,000 | 288,000 |
| 3 | 0 | 0 | 0 |
| 4 | 5,760,000 | 172,800,000 | 5,040,000 |
| 5 | 72,000 | 1,008,000 | 72,000 |
| 6 – Proposed | unknown | unknown | unknown |

Outfall #1: Base of Fish (Adult Return) Ladder
The majority of river and well water used for hatchery operations returns to Icicle Creek from Outfall #1 near the base of the adult return ladder (~ rm 2.8) except during rearing unit cleaning and maintenance activities when all water is routed through the pollution abatement ponds. All river water and groundwater used at the hatchery, minus any leakage and evaporation, is returned to Icicle Creek (non-consumptive use).

Outfall #2: Pollution Abatement Ponds
As of 2011, Leavenworth NFH has a second functional pollution abatement pond. When online, both pollution abatement ponds discharge into Icicle Creek at Outfall #2 (~rm 2.7). Outfall #2 is used during rearing unit cleaning and maintenance activities.

Outfall #3: Overflow Canal from the Screen Chambers
Currently, Outfall #3 (~rm 3.8) is not used as a discharge point by the hatchery. However, the hatchery wishes to retain this discharge point for potential future use. In the past, Outfall #3 was operated intermittently as a fish return bypass for the hatchery's water delivery system.

Outfall #4: Top of Fish (Adult Return) Ladder
In the past, Outfall #4 was used for 1 to 2 weeks a year in late April to release hatchery pre-smolts into Icicle Creek (~ rm 2.8). Currently, pre-smolts are pumped from rearing units through an above ground pipeline into Icicle Creek at approximately rm 2.75 (Outfall #5). However, the hatchery wishes to retain Outfall #4 for emergency releases and potential future use. When in operation, discharge from Outfall #1 is reduced by the amount released at Outfall #4.

Outfall #5: Pumped/Piped Fish Release
Outfall #5 is currently used for 1 to 2 weeks a year in late April to release hatchery pre-smolts which are pumped from rearing units through an above ground pipeline into Icicle Creek (~ rm 2.75). When in operation, discharge from Outfall #1 is reduced by the amount released at Outfall #5.

Outfall #6 (Proposed): Pump Discharge to Hatchery Channel

Leavenworth NFH is proposing to pump a portion of discharge water destined for Outfall #1 upstream to a new discharge point (Outfall #6) in the Hatchery Channel section (rm 2.8 to 3.8) of Icicle Creek. The details of where, when, and how much discharge will be released at proposed Outfall #6 are currently being determined by Leavenworth NFH. The hatchery will provide this information to EPA within the next 6 months.

B. Rearing and holding units currently in operation at Leavenworth NFH include:

- 2, 15' x 150' adult holding raceways
- 45, 8' x 80' raceways
- 14, 10' x 100' covered raceways
- 122 fiberglass tanks
- 16 of 40 small Foster-Lucas rearing units
- 2 of 22 large Foster-Lucas rearing units

C.1. Icicle Creek is the receiving water body.

C.2. Leavenworth NFH's water sources include Icicle Creek, Snow/Nada Lake Basin, and 7 wells. The hatchery's water rights include:

| CERTIFICATE # | PRIORITY DATE | SOURCE | AMOUNT |
|---|---|---|---|
| 1824 | 03/26/1942 | Icicle Creek | 42 cfs (18,851 gpm) |
| 1825 | 03/26/1942 | Snow & Nada Lakes | 16,000 acre feet |
| | | | |
| 016378 | 08/01/1939 | Groundwater (1 Wells) | 1.56 cfs (700 gpm) |
| 016379 | 06/01/1940 | Groundwater (1 Wells) | 2.01 cfs (900 gpm) |
| 3103-A | 10/16/1957 | Groundwater (1 Wells) | 2.67 cfs (1200 gpm) |
| G4-27115C | 10/20/1980 | Groundwater (4 Wells) | 8.69 cfs (3900 gpm) |